



National Aeronautics and Space Administration
Goddard Space Flight Center

Wallops Flight Facility, Wallops Island, Virginia

Inside Wallops

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NASA Awards University Concept Studies for Earth Science Projects

Of the twenty-four proposals submitted, NASA's Office of Earth Sciences will fund four innovative Earth system science investigation concepts for future development as complete spaceflight missions or secondary payload instruments through the University Earth System Science (UnESS) Project.

"The UnESS program was established to foster the development of the next generation of Earth system scientists, engineers, managers, educators and entrepreneurs through significant and meaningful hands-on student involvement in Earth observation space missions at the university level," said Dr. Ghassem Asrar, Associate Administrator for Earth Sciences.

"NASA's Earth Science enterprise and the aerospace industry will benefit from having these experienced scientists and engineers graduating through this program that provides hands-on experience," Asrar said.



"Funding for these extended mission concepts during a study phase of nine months will be approximately \$300,000 each. At the end of this phase, we will select two missions and one back up for final implementation. The two primary missions will be funded at \$15 million each," Asrar stated.

The hands-on student involvement in these mission concepts ranges from helping prepare the proposals to analysis and distribution of data to the science community.

Final selection of the missions for development will give equal weight to the scientific and student/applications involvement aspects of the proposals.

The four concepts chosen for further development are:

* The "SPACE" mission, proposed by Columbia University, New York, NY, would examine, from aboard the International Space Station, the

scattering properties of clouds and aerosols over a two-year period.

* The THOR mission, proposed by the University of Alabama in Huntsville, hopes to examine in unprecedented detail the growth and decay of thunderstorms through continuous observations of lightning over the Americas and adjacent oceans. By placing a lightning-monitoring sensor on a weather satellite, the THOR team hopes to gain radical new insight into the formation and evolution of thunderstorms.

* The Coral Reef Ecosystem Spectro-Photometric Observatory, proposed by the University of Hawaii, Kaneohe, would look at the health of coral reefs around the world. By using spaceborne spectral observations of the reefs, scientists hope to determine how climate change may be affecting these vital contributors to Earth's health.

* CIRRUS, proposed by the University of Wisconsin, Madison, would be an instrument flying aboard the International Space Station to look at clouds and, in particular, cloud ice. Understanding cloud ice will greatly enhance our understanding of clouds and their role in the global climate system. In addition to these four proposals, NASA will consider two other meritorious proposals in the area of ocean height and wind speed and direction, using highly innovative technologies.

The originators of those two proposals, from the University of Texas at Austin and the University of Colorado, Boulder, will be encouraged to work together to combine their mission concepts for NASA consideration during the final selection process.

These missions are sponsored by NASA's Office of Earth Sciences in an effort dedicated to studying the long-term effects of natural and human-induced changes on the Earth's global environment.

The University Class Projects Office at the Goddard Space Flight Center's Wallops Flight Facility manages the UnESS Project for NASA.

**The next edition of
"Inside Wallops"
will be April 24.**



NASA and Pocomoke High School Teaming to Protect Wallops Island

The NASA Wallops Flight Facility is teaming with the Pocomoke High School Ecology Club, Pocomoke City, Md., to plant dune grass that will help protect the facilities and launch complexes on Wallops Island, Va.

NASA is interested in establishing a strong back dune ecological community behind the sea wall that protects NASA's rocket launch facilities and Navy facilities on the island. These dunes will aid in protecting the shoreline from severe erosion and flooding caused by coastal storms.



*Pocomoke High School students plant dune grass in a test dune north of Pad 2.
PAO Digital Photo*

On April 6, 2000, approximately 40 students planted dune grass on two 100 to 150 foot long test dunes. Beach grass is essential in stabilizing coastal sand dunes and preventing shoreline erosion. These dunes are located at two locations on the Island behind an existing rock sea wall.

Wallops personnel will monitor precipitation, growth rates, natural regeneration, impact on erosion, and use various horticultural techniques to manage the grasses.

The results from this project will help Wallops officials in determining the best methods to develop the back dune for protecting the vital resources on the island.

Survey Shows NASA Employees Among Most Satisfied Federal Workers

According to a newly published government survey, NASA employees enjoy a greater level of job satisfaction than most other federal workers. The National Partnership for Reinventing Government (NPR) Employee Survey showed NASA employees gave the agency the highest favorable ratings in 14 out of 32 categories.

Harvey Needleman Retires



Harvey Needleman (above), Chief, Balloon Program Office retired effective April 3, 2000. Photo by Rick Huey.

Warm, West and Windy

by Bob Steiner, Meteorologist

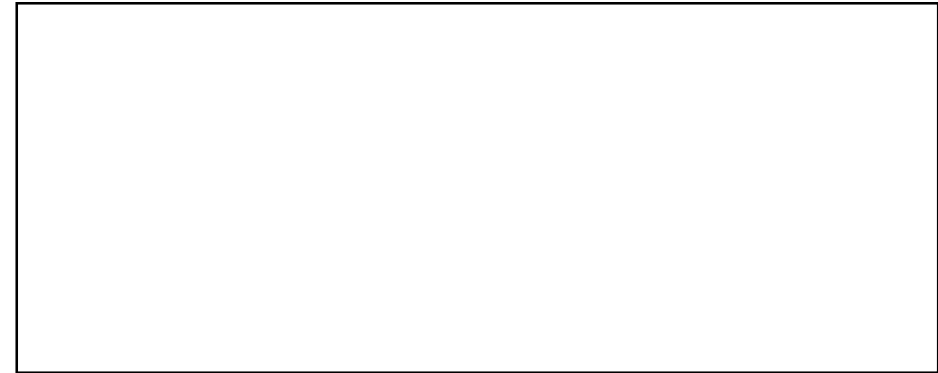
March is generally a month of cool temperatures and brisk winds. March 2000 was a bit above average with temperatures nearly four degrees above average at 49 degrees.

The warmest day of the month was March 8 when a new record high of 80 degrees was recorded. The previous record high was 69 degrees set in 1987. Another new record high of 77 degrees also was recorded on April 9 breaking the old record of 73 degrees set in 1968. March 18 through 23 was the coldest period of the month when daytime high temperatures ranged from only 39 to 49 degrees. Even with these few cool days, the temperature reached 50 degrees or more on 25 days during March. There were six nights when the temperature dropped to 32 degrees or lower with the lowest temperature, 29 degrees, being recorded on March 1.

Rainfall was recorded on 11 days during March making it a wetter month than is normal for this area. The most rainfall recorded during a 24-hour period was 2.86 inches, which fell on March 20 and 21. This was over half the total for the month of 4.84 inches. Rainfall for the month was almost an inch above normal. March also is historically a good month for “NorEasters” in the area. This year we experienced one on March 22, which produced wind gusts up to 58 mph (50 knots).

Folks, May and mild, comfortable temperatures is just around the corner. The average high temperature for May is a delightful 71 degrees, and the average low is a comfortable 53 degrees. The all time high for May is 97 degrees, which occurred on May 31, 1991. The all time low of 34 degrees occurred on May 8, 1974. We can expect 10 days with measurable rain, delivering on the average, a total of 3.24 inches of precipitation for the month.

During May, we also will see an increase in thunderstorm activity, which can produce large hail, strong gusty winds and even tornadoes. As we begin to enjoy outdoor activities, keep in mind that storms can occur at any time, especially in the late afternoon and early evening. Be alert to any change in the weather pattern.



Celebrate Earth Day at the Visitor Center

April 22, 2000

10 a.m. and 1:30 p.m.

Earth Science Puppet Show

Learn more about our Earth with puppets, Jeff and Jenn

10:30 a.m. and 2:30 p.m.

Earth Day Jeopardy Game

Match wits in a friendly game of Earth Day Jeopardy



11:30 a.m.

Landsat Imagery “Earth from Space”

Earth from Space is a presentation on what we can learn about Earth as it is viewed from space.

Noon

Soda Bottle Science

Turn a 2-liter soda bottle into a home for plants

2 p.m.

Earth Environment Demonstrations

Help make a volcano, test the purity of water and find out what’s in the soil.

3 p.m.

Main Base Biking Tour

Bring your own bicycle and tour the Main Base. Participants must wear helmets and sign-up at the Visitor Center by 2 p.m.



On the hour 11 a.m. to 3 p.m.

Predator Prey Game

Be a part of the food game in a game about the life cycle.

Throughout the Day

Make an Earth Flag

Create your own Earth flag and enter the contest. Flags will be displayed in the Visitor Center. Three winners will be announced by 3 p.m.

For further information on any of the Earth Day events, call Berit Bland, x2297

Pre-S.A.T. Testing

For Grades 8-12

April 15

9:30 a.m. - 1 p.m.

Bldg. E-2

Info call David Smith, x1316 or Roland Wescott, x1624

Easter Egg Hunt

April 15

10:00 a.m.

Bldg. F-3

Children ages 10 and under
Prizes, Hot Dogs, Sodas, Videos



The rain date is April 22. Volunteers are needed for this event.

Contact Gerry McIntire, x1889 or Bev Hall, x1714

From FEDweek

April 5 Issue

Reward/Discipline Systems Score Poorly

Overall, federal employees are more satisfied with their jobs and are about as satisfied as are private sector workers but many federal workers are frustrated with the government’s failure to reward outstanding employees or deal with poorly performing ones, a new survey shows. The survey by the National Partnership for Reinventing Government is the most recent thorough look at the state of the federal workplace from the employee’s point of view and could have important implications for future personnel policies.

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